Ch 1826 No 104
Branch

Sign of the Bust in 2d above Race Wm Cornell

#15

An Inaugural Dissertation on Cynanche Trachealis

Submitted to the Examination of The Trustees & Medical Faculty of the University of Pennsylvania On the Twenty-first Day of December 1825.

For the Degree of Doctor of Medicine

By William Coryell of New Jersey.

Passed March 25th. 1826

On Cynanche Trachealis

If we examine the records of medicine, we shall find this disease noticed by some of the older writers: but if we were to judge from their delineations, and mode of treatment, we should believe, that they were not accurately acquainted with it, or, that in their day it was of so rare occurrence, or of so mild a character, as not to demand that close, and strict investigation which physicians of more recent times have thought proper to devote to

it. Dr. Home of Edinburgh was almost the first who scientifically scrutinized its nature and character, and laid down a plan of treatment, more congenial to its true grade. Since that period, it has claimed the strictest attention from celebrated men in various parts of the globe.

As a part of the duty incumbent on those who seek the honours of the University, I propose to offer a few remarks on this disease. Could I hope to advance in the most remote degree the science of medicine by the suggestion of any new or important idea, or trace a more efficacious mode of treatment, I should joyfully execute this portion of my task: but when I call to recollection, the character and standing of many who have

written on the subject: when I compare their extensive experience with my own limited opportunities, and looking inward at my own feeble power, I am almost disposed to cast away the pen in despair. And if perchance, any novel sentiment may have arisen in my mind, and I should feel disposed to hazard its exhibition, I reflect that the juvenile attempt is to meet the scrutiny of those, whose names stand high in the temple of fame, and that every opinion suggested must stand the investigation of unrivalled skill and experience: under these considerations I almost shrink from the attempt: but buoyed up by the hope, that the effusions of a Tyro will be viewed in their true and proper light, and not weighed in the same scale with the

emanations of skill and experience. I attract the subject.

"Croup or Tracheitis. "It is to be known by a peculiar ringing sound of the voice, by difficult respiration, with a sense of tightening about the larynx, and by a fever" attending it.

"This disease seldom attacks infants till after they have been weaned. "After this period, the younger they are, the more they are liable to it. "The frequency of it becomes less as children become more advanced; and there are no instances of children above twelve years of age being affected with it. "It attacks children of the midland, as well as those who live near the sea. "It does not appear to be contagious, and its attacks are frequently repeated in the same

child. "It is often manifestly the effect of cold applied to the skin; and therefore appears most frequently in the winter & spring seasons. "It very commonly comes on with the ordinary symptoms of catarrh, but sometimes the peculiar symptoms of the disease show themselves at the very first.

"These peculiar symptoms are the following: "A hoarseness, with some shrilling, and ringing sound, both in speaking and coughing, as if the noise came from a brazen tube. "At the same time, there is a sense of pain about the larynx, some difficulty of respiration, with a whizzing sound in inspiration, as if the passage of the air were straitened. "The cough which attends it is commonly dry; and if any thing be spit up, it is a matter of a purulent

appearance, and sometimes films resembling portions of a membrane. "Together with these symptoms, there is a frequency of pulse, a restlessness, and an uneasy sense of heat.

"When the internal fauces are viewed they are sometimes without any appearance of inflammation: but frequently a redness and even swelling appear; and sometimes in the fauces there is an appearance of matter like to that rejected by coughing. "With these symptoms now described, and particularly with great difficulty of breathing, and a sense of strangling in the fauces, the patient is sometimes suddenly taken off.

Cullens first lines.

"There is likewise a rare disease,

sometimes occurring in certain countries, never in others, called the croup (by nosologists cynanche stridula) "In this disease the respiration is laborious, the inspiration sonorous, with hoarseness, a ringing cough and a swelling scarce to be discerned. "It is a disease that infests young children almost only.

Browns Elementa Medicina

"The croup is an inflammation of the upper part, and the peripneumonia of the lower part of the same organ viz. the trachea or windpipe.

"Dr Loichman of Hanover believes that the acute asthma of Miller or hives, has been confounded with the angina polyposa or croup, which has occasioned the great difference in the treatment recommended by authors; as the disease

has been esteemed inflammatory by some, and spasmodic by others.

"The convulsive asthma, which I have witnessed in one child, was readily distinguished from the croup; as there was sensible a great exertion in breathing, but without the harsh sound which attends the inspiration in the latter. A convulsive difficulty of respiration may thus be easily distinguished from the croup: as in the former the patient draws in the breath easily, and then voluntarily closes the larynx, and voluntarily uses great exertion in forcing out the breath, with design to relieve some pain by this violent exertion, as in hysterics & epilepsy.

"On the contrary in the croup, the breath is easily expired, but the inspi-

rations are attended with the utmost difficulty. "This difficulty of inspiration may be seen by viewing the region of the stomach; as when the child raises the sternum for the purpose of drawing in its breath, the pressure of the atmosphere on the pit of the stomach presses the diaphragm upwards, and makes a sudden and great hollow in the scrobiculus cordis. "This difficulty of inspiration and not of expiration, is also known by the harsh sound, which only attends the inspiration."

Darwins Zoonomia.

"The croup is an inflammatory affection of the mucous membrane of the trachea and larynx, which in some instances extends, however even

to the bronchia and over the surface of the lungs, to which children are peculiar subject. [illegible]

such as the muscle scalenus, or even the muscles of the larynx." Thus stands

"Angina tonsillaris." This is the common sore throat of children, a disease to its simplicity and totally has fixed the attention of authorities and practitioners like it is we could do the difficulties, or rather more could be a successful method of cure than has been to be adopted.

"Angina tonsillaris" from the tone to be a disease usually called also angina membranacea, inter a, herpetica, pultacea, etc. Thus suffocativus, and morbus strangulatorius, it is a little a disease of children and distinguished by a difficult inspiration sometimes with a hoarse, hard cough, with some membranous in the throat, and no diffi-

[illegible] cough
[illegible] days after the fever
[illegible] comes on, with little or no fever
[illegible] extreme, [illegible] attended
[illegible], increasing to [illegible] suffocation
[illegible] the scene. The other
[illegible] are [illegible] The pulse
[illegible] a little hurried, slight quickness, in
the [illegible] become very rapid and low.
The face at first flushed, and the latter
[illegible] livid, though sometimes full. The
stomach and bowels are [illegible] with
[illegible]. The cough is dry, [illegible] substances
are thrown, and the patient [illegible]
with an attempt to [illegible] something
solid from the trachea. The internal
[illegible] are in a very few instances, [illegible]
[illegible]. At sometimes [illegible], as
[illegible] the [illegible] [illegible]

that in some localized spots a secretion to exist at least seems to have attacking those above twelve years of age.

The profession of the practice of medicine in the United States of France, divides the sufferers into three stages, each with a peculiar treatment in the formidable, fatal and dangerous pneumonia.

From the detailed description of this formidable disease, illustrated by a few of the most celebrated writers on the subject, and descriptions of numerous cases, I would the description further. I proceed to enumerate the causes. These I find reduced into remote and proximate. Convinced in all, that the remote cause or causes of pulmonic consumption must have been the same as those causing the animal

disease, while this form of it can only be con-
sidered as an extension of original disease to
the heart usually affected in the [illegible].
The remote cause of idiopathic carditis has
been universally attributed to cold suddenly
applied to the body, or to the operation
of those causes which to a less extent in
the effect of disease which [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] colitis.

But the proximate cause has been attributed
[illegible], and to various. Some contended
that it was stimus, others diminished or
decreased tone, that it was [illegible] [illegible]
tion, and that it was of [illegible] nervous
much the effect of inflammation [illegible] irritation.
With pleasure could we read the various
cases adduced to each but the limits of
[illegible] [illegible] the others, [illegible] [illegible] of

[illegible] now to the one side, then to the other
with the credibility of the witnesses varied
each night for the most part [illegible]. But
this [illegible] is [illegible] into [illegible]
[illegible] when we reflect that this difference
of opinion demands a still greater degree
of practice in [illegible] [illegible]
[illegible] of the hospital cure
of this terrific disease. The line of [illegible]
very many, [illegible]. It is true, that
the advocates of its [illegible] cure admit,
that in its latter stages it becomes de-
cidedly inflammatory, but a judicious
administration of remedies has enabled
to overcome [illegible] effects. Prompt
bleeding [illegible] early stage, [illegible] prevent
the inflammatory effusion [illegible]
which ultimately closes the passage
to [illegible] the [illegible] you are

held that the idea of [illegible] as the [illegible] a
proximate cause tends to the [illegible]
of the one mode of treatment that [illegible]
tue the disease. If the advocates of each
opinion adduced [illegible] more in con-
firmation of their cause, we might still
believe that [illegible] [illegible] [illegible]
might settle the point. but here again,
we are at sea, each party drawing proof
from the very source. [illegible] we [illegible] [illegible]
to dispute evidence to either side. but how
shall this discordance be reconciled? only
upon the supposition, that [illegible] [illegible]
there may have so [illegible] the mind, [illegible]
to credit evidence unless it be of the most
indubitable [illegible] nature. That
slight inflammatory action, [illegible]
of the [illegible] [illegible] [illegible] so
little advance as to evidence itself [illegible]

post-mortem [illegible] certain [illegible] the constitutional [illegible], [illegible] death have in other cases [illegible] this disease in an organ of such delicate structure as the lungs, may be so great as to produce suffocation, [illegible] no doubt

A case illustrative of this idea has been related to me by my friend. A young lady of irritable temperament was seized with a severe inflammatory affection of the lungs, but attended with little or no febrile affection; and in a few days was deemed of trifling importance both by herself and her friends. [illegible] although the constitutional [illegible] seemed [illegible] to [illegible], at length this unexpected [illegible] [illegible] attempt to swallow some food [illegible] the [illegible] [illegible] into the stomach

and it was proved to the satisfaction of the
[illegible] and a great [illegible]
an attempt was made to [illegible] the
[illegible] of this [illegible] and
[illegible] strength [illegible] and [illegible]
[illegible] food, and [illegible]
[illegible] after the [illegible] weeks, the
[illegible] was made to [illegible] of a
[illegible] to [illegible] the [illegible] of
the body in [illegible] fluids. [illegible]
was no [illegible] obstruction to the [illegible]
to the stomach and [illegible] the [illegible]
the [illegible] of [illegible] from the [illegible],
as in the latter [illegible] of the [illegible].
[illegible] an inspection of the whole intestinal
canal, evidence of the [illegible] of [illegible]
from the stomach similar to the [illegible].
[illegible] was introduced into the stomach
in this case, and an attempt was

made to act at the commencement of life, the inertia of substances through a number, but the irritability of the tissues was not at the time the attention was drawn, is to make it sufficient.

The chief cause of the immediate cause of our malady, is an intense irritation by a virus, nor can it be reasonable to suppose that the action of the whole constitution would be likely to create such a violent inflammatory action. The most violent of these morbid diseases are more commonly the results of local causes, for example, Tetanus is frequently the attendant of lacerated, and conditions by the ulcerous effect of heat. and let me ask does tetanus ever exist in inflammation unless arising from a local cause, and in that case, if active inflammation can be by artificial means carried to the

suppurative heart, the original disease is relieved, and in some cases the heart is when over the inflammation is carried to the suppurative, effusive, or secretive heart, the violent convulsive contractions attendant to abate. Let the point be considered a little further. A child exposed to the action of a, a tonic is produced upon the extremities, a motion of the blood usually carried off by insensible respiration is retained, and in a certain period the before the tonic act with diminished force, the remainder of the before and heart is quite increased action from its accumulation a secondary or reflex action takes place in the heart of the child and [illegible], in certain constitutions and predisposition, in the constitution of the child, the effects of that year just now decided

and more acute the inner distension (if such expression is correct) that the sensation of pain is felt, how do they feel it, either by a peculiar distension, or by increased acrimony; in either case reasoning from the nature of the effective cause, by analogy of the bladder, or from analogy, we might presume that inflammation would be the result, yet we can assume that the inflammatory process in its early stage before the disease has run its course, gives by the disorganization of the cells in which is the new membrane, a peculiar condition, so that the nerve filaments, after such irritation, are that the continuance of this pain for a few hours would not be life. Was it therefore to assume an opinion in this case, it would be

2nd That the remote cause of it is cold, and
with the diminishing the motion and exci-
tation of the muscular irritation.
That this diminished action in the extremities
induces increased action in the vessels of inner
[illegible] machine. That the increased action thus
induced, is inflammatory, and I [illegible] the
[illegible]

1st From the usual effects produced by obstruc-
ted perspiration on other parts of the system
of similar structure.

2nd From the violent pyrexia which ushers
in [illegible] an attack of this disease

3rd From its resulting so generally from the
application of cold, which is the common
remote cause of all our inflammatory diseases

4th From the well known fact that rheumat-
ic diseases of their own accord seldom if
ever terminate in inflammation, but [illegible]

they do destroy life, it is so rotten and noxious.

"In the second place, at the time of the death of the animal, the whole organs have ceased the vital action, and consequently, gives up the various fluids, and therefore a putrefactive process of some kind takes place.

"In this process, a portion of gas is evolved, which is made evident in a few days.

"But in such cases, the development of the vehicle from an external influence, has been so limited, as to leave little or no evidence of its exist[illegible] after death.

"But from the cause, has originated the opinion of the disease being of a gaseous mode, and that inflammation when it did exist, was the effect not the cause

of this disease.

If the chemical views be correct, it will at once be perceived, that all means calculated to remove pain, as the original cause of the disease must be injurious, and that all means should be directed to the destruction of inflammation, as a sine qua non of cure.

Whether the membrane so generally found in this complaint be an altered secretion from the glands of the part, or a peculiar suffusion or exudation from the exhalents, is a point which I shall not attempt to discuss, as in a practical view I deem it of little importance.

In the treatment of this disease, the same principles and indications must be adopted. There is no time for reflection, delay at an so general and invariable in its

of

and cases is almost inadmissible here.
The moment the disease is ascertained that
instant active measures should be used.
Knowing the disease is decidedly inflamma-
tory, the lancet should not be spared. The
most eminent physicians of the present day
advise venesect. and antimonium. powerful
emetics, warm bath to aid their opera-
tion which is frequently difficult. Mercu-
rial purges. and if relief is not quickly ob-
tained, repeat the bleeding and emetics
as long as the strength will justify, or un-
til the disease is conquered. Blisters are
highly recommended and if the disease
continues after you have carried the active
evacuations as far as prudent they ought
to be applied. but much benefit cannot
be expected from the blister to the throat,
as it is almost impossible from the violence

efforts of respiration, to confine it to the part. When the bronchia are affected, placed on the sternum they are often highly important. In addition to the means here advised, every collateral aid should be given, by steaming with warm water, or warm vinegar and water. The free use of diluents, such as barley water flax seed tea, gum arabic emulsion, and in protracted cases a strong decoction of polyg: senega, as recommended by Dr. Archer of Maryland, not as an antispasmodic but expectorant. The hive syrup, a prescription of Professor Coxe, is here a valuable preparation.

Laryngotomy, as a dernier resort, has in some instances been resorted to. and cases are on record of life being saved thereby. In genuine idiopathic croup unac-

companied by bronchial effusion, after the failure of other remedies, it certainly ought to be tried, as it is the imperious duty of the physician, however forlorn the hope, to use every possible means to rescue his patient from death.